## VALVE ELECTRONIC

	Specification MAP/CV339/Issue 3 Dated 21.7.49.	SECUR	TTY	D
•	To be read in conjunction with K1001, ignoring clauses 5.2, 5.8.	Specification RESTRICTED	<u>Valve</u> UNCLASSIFIED	
	Indicates a c	hange		•
i.	MVDF OF VALUE Fraland Tricered			Ī

Indicates a change							
CATHODE: Cold ENVELOPE: Glass protect	/ELOPE: Glass - unmet protected (se		BASE 3 pin Quindecal				
RATING			Pin 1	Electrode Trigger electrode			
Trigger Voltage (kV) Min. Working (kV) Voltage	3.5 6.6	A A	2 to 7 8 9 to 14 15	Omitted Anode			
Peak Output (kW) Power	150		ĨĆ	Cathode TOP CAP			
			See	K.1001/A1/D5.11  DIMENSIONS			

NOTES

Under the following conditions:-

Main Gap Voltage = 7.2 kV. =  $0.5 \mu sec.$ 

Pulse Length Repetition Frequency = 1200 per sec.

Constant current charging is used and the load and line are matched.

В. The valve shall be provided with adequate splinter proofing.

See drawing on page 4

CV339 TESTS
To be performed in addition to those applicable in K1001.

Г			Li	mits	No.	T
	Test Conditions	Test	Min.	Max.	Tested	Note.
For	For the purpose of the following tests, all electrode potentials shall be measured with respect to the anode, which encloses the trigger rod.					
<b>a.</b>	Cathode Voltage = -4.5kV. max. Trigger circuit shall be derived from an approved pulse generator supplying a positive pulse of 9.0kV. + 10% on open circuit, at a repetition frequency of 1200 per sec. and with a build up time to max. voltage of 0.5-0.75 µsec. The line shall be of 80 Ω impedance and designed for a pulse length of ½µsec. and shall be charged through a choke of 180H. The external load shall be matched to the line.	A spark shall occur which also delivers power to the load circuit.			100%	1
ъ	Cathode voltage = -7.2kV. Other conditions as in test clause 'a'.	Trigger break- down Voltage (kV).	•	5.0	100%	
C	Cathode Voltage = -6,6kV. Other conditions as in test clause 'a'.	i. Jitter (µsecs.) (Total lateral move- ment of the trailing edge of the monito- red pulse). ii. Fluctu- ations of amplitude.		0.2 ±10%	100%	

Page 3

To be performed in addition to those applicable in K. 1001.

CV339

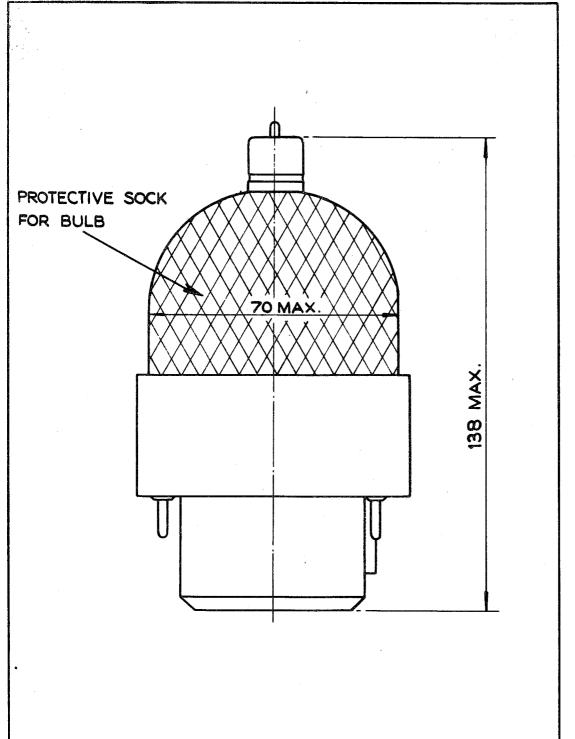
·	Test Conditions	Test	Limi Min.	ts Max.	No. Tested	Note
a.	Cathode Voltage = -8.4 kV. Other conditions as in test clause 'a'.	i. Jitter (µsecs.) (Total) lateral movement of the trailing edge of the moni- tored pulse).  ii.Fluctuations of amplitude.	-	0.2 ±10%	100%	
•	With set up as in test clause 'a' the cathode voltage shall be in- creased until unstable operation occurs.	Negative Cathode Voltage at which irregular break- down (i.e. break- down not corre- lated with the trigger pulse) occurs at a rate of between 1 and 6 times per sec. (kV).	14.0	•	100% or S	

## Note

1. Test clause 'a' must be performed first in test schedule.

CV 339

PAGE 4



DIMENSIONS IN M/M